

Work Order ID 76839

76839

Page 1

November 22, 2011 8:11:36 AM

Item ID: D6101-007 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Saddle Billet
 Start Date: 11/22/11 Start Qty: 60.00 ***60*** Cust Item ID:
 Required Date: 12/06/11 Req'd Qty: 60.00 ***60*** Customer:
 Reference:

Approvals: Process Plan: CL Date: 11/11/22 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D6101	Rev B								

100 PURCHASING 0.00
100
 Purchasing Memo 0.00
 Purchasing Issue P/O: 15518
 a) Description: Aluminum billet
 b) 7.750" x 8.250" x 2.50" thick
 c) Tolerance on all dimensions are +0.030"/-0.000"
 d) Grain direction along 7.750" length
 e) Material: 7075-T7351 (QQ-A-250/12)
 f) Material certification required

CL 11/11/23 50

110 Receive & Inspect for Damage & Mat'l Certs 0.00
110
 Packaging Memo 0.00
 Packaging Ensure material certification is attached

PL/2/6 50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

* **NOTE:** Date & initial all entries

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing Memo Ensure Material certification comply to Dwg D6101	0.00 0.00	<i>mk 11/12/08</i>			<i>50</i>	<i>0</i>		
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <i>MAT 44</i> Memo	0.00 0.00	<i>mk 11/12/08</i>			<i>50</i>	<i>0</i>		
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							<i>11/12/08</i> <i>mk</i> <i>11-12-08</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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* **NOTE:** Date & initial all entries

Picklist Print

November 22, 2011 8:11:36 AM

Page 1

Work Order ID: 76839

Parent Item: D6101-007

Start Date: 11/22/11

Required Date: 12/06/11

Parent Item Name: Saddle Billet

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP A: 01.05.04New IssueEC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6101-007P 7075-T7351 8.25X7.75X2.5		Purchased	No			110	Each	0.0000	1	60			

Supp/c (50)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

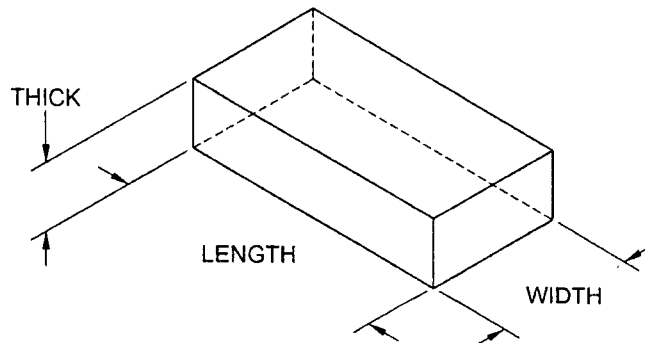
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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SPECIFICATION CONTROL DRAWING



PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH x WIDTH x THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

B ACCEPTABLE SPECIFICATIONS FOR 7075-T7351 ALUMINUM ARE AMS-QQ-A-250/12, QQ-A-250/12, OR ASTM B209

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length
D6101-015	7075-T7351 (QQ-A-250/12)	9.450	6.250	2.500	Along 9.450 Length
D6101-017	7075-T7351 (QQ-A-250/12)	6.350	6.250	2.250	Along 6.350 Length

B

RELEASED
09/07/15/WP

C/L 111122

WRO. 76839

B	ADDED D6101-015/-017, ADD ASTM B209	RF	09.04.23
A	NEW ISSUE	CP	01.03.30
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	D6101	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SADDLE BILLET, 7075	NTS
DATE	09.04.23	<small>COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

**Castle Metals®**

A. M. Castle & Co.

BORDEREAU DE MARCHANDISES

Page 1 of 2

No de Formulaire d'Emballage / Shipment No: 1089986

Expédié de / Ship From: A. M. Castle & Co. (Canada) Inc. MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2		Vendu à / Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Expédié à / Ship To: WILL CALL-MONTREAL 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Livré à / Deliver To: WILL CALL-MONTREAL 835 SELKIRK AVENUE POINTE CLAIRE, QC H9R 3S2 CA	
Date d'expédition / Date Shipped 05-DEC-2011	F.O.B. ORIGIN	Modalités de transport / Freight Terms Prepaid	Transporteur / Carrier MANITOULIN		No du Bon de connaissance / BOL No 1089986-2		

Détails d'expédition / Shipment Details	Destination finale / Final Destination Branch - MON
--	--

N° de commande / Order No 1853452	N° de ligne / Line No 2	N° d'article / Item No 752241.MO	Description 2.5000.PL.7075.T7351.ALUMINUM.USI.48.5000.144.5000 CUT 2SIDED TO 8.25 IN (+ .0620/- .0000 IN (GRAIN TO RUN ALONG 7.75")) X 7.75 IN (+ .0620/- .0000 IN (GRAIN TO RUN ALONG 7.75")) - ALUMINUM PLATE SAW SPECIFICATIONS: QQ-A-250/12
N° de bon de commande / Purchase Order No 15518	Nbre de pièces / Part Number YOUR ITEM NUMBER: D6101-007		Qté commandée / Ordered Qty 50.00 PCS
			Qté Facturée / Invoice Qty 50.0000 PCS

Détails / Details							
N° de livraison / Delivery No :	Usine / Mill	No de coulée / Heat Number	Code méc / Mech Id	Pièces / PCS	Largeur (Pouce) / Width (IN)	Longueur (Pouce) / Length (IN)	Qté expédiée / Shipped Qty(LBS)
107514308		527601		20			330.63
107514308		527601		20			330.63
107514308		527601		10			165.32

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
 These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, were/are exported thereunder. Diversion contrary to US Law is Prohibited.
 Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'

These commodities, technology or software were exported from the United States in accordance with the Export Administration Regulations. Diversion contrary to US law prohibited.
 Date Printed: 05-DEC-2011 02:45:16 PM



Castle Metals®

A. M. Castle & Co.

BORDEREAU DE MARCHANDISES

Page 2 of 2

<p>essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.</p> <p>We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.</p>		
<p>Ce matériel a été reçu et inspecté par Reviewed by Authorized Castle Metals Representative:</p>	<p>Date:</p>	<p>Name:</p>

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS
Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young
Kenton P. Young
Quality Assurance Manager

1028639 Ship Date	0 B.L. No.	Invoice No.	Alcoa No. Item	Page 1
2009-07-06	4066185	00000	1000117894-1	
P.O. No./Govt Contract No.		Customer	Alcoa Item	Mfg Order
8876		A M CASTLE&COMPAG041109843R02DS-17894-01-1		

Ship To: A M CASTLE & COMPANY
12 CASCADE BOULEVARD
ORANGE 06477 CT

Item Description
2.5 IN TK (+.075 -.075) X 48.5 IN W (+.3125 -
0.000) X 144.5 IN LN (+.5 -0.0) CAT X 752241 (N) A/T 7075-
T7351 RECTANGLE MILL FINISH, USI 3MM DEAD ZONE REQ'D BOTH SIDES,
SAWED 752241. AMS-QQ-A-250/12 IS 2007 AMS-STD-
2154 EXC MRK AMS4078 REV G BSS7055 REV A
CST1006 REV D GAMPS9101 REV B EXC MRK MMS159
REV N PS21211 REV K ((MARKED)) NOT
INTERLEAVED MAX GROSS SKID WGT: 5000 LB QUAN TOL +/-
40 % USI CL A 3 MM CQR 0222142 REV 02 CUST REQ 09-06-
22 *** W/B 09-06-27 ***

Num	Package Ticket	Lot	Weight	Quantity	UOM	Pc Id/Serl
1	741658	527601	1788	1	PC	:
2	741662	527601	3560	2	PC	:
3	741663	527601	3580	2	PC	:
			8928	5		

RECEIVED
JUL 08 2009

Notes for CQR: 0222142.2
PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ- A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12F. PROD UCT
PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12.
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.
PRODUCT PRODUCED TO THE REQUIREMENTS OF MIL-STD-2154 ALSO MEET THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO THE
REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF MIL-STD-2154.
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.

CQR: 0222142.2 -Specification Limits

Temp	Dir	UTS KSI	TYS KSI	EL4D PCT
T7351	Long Transv.	Max	63.9	
		Min	52.0	6
T7351 Elec. Cond. (RC) % MIN 38.0 PCT				

RECEIVED
JUL 08 2009



002/007

D
+

TRANSMETALS

07/08/2008 16:35 FAX 2037950783

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS
Ship From: RIVERDALE, IA.

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Per:

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

1028639 Ship Date	B B.L. No.	Invoice No.	Alcoa No. Item	Page 2
2009-07-06	4066185	00000	1000117894-1	
P.O. No./Govt	Contract No.	Customer	Alcoa Item Mfg Order	
8876		A M CASTLE&COMPAG041139843R0205-17894-01-1		

CQR: 0222142.2 -Specification Limits (cont.)

Chemical Composition		SI	FE	CU	MN	MG	CR	ZN	TI	Other	Other
		Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05
		Min		1.2		2.1	0.18	5.1			0.15
Alloy 7075											
Lot: 527601 - Mechanical, Physical, Metallography, Quantumeter Results											
	No->	UTS	TYS	EL4D							
	Test	KSI	KSI	PCT							
Temp	Dir	70.7	58.8	10.6							
T7351	Long Transv.	71	59.6	10.5							
		69.8	58	10.5							

T7351 Elect Cond %IACS 40.2 40.4 40.9 PCT

Cast Number	Chemical - OES	SI	FE	CU	MN	MG	CR	ZN	TI
H4526036	Actuals	0.05	0.27	1.7	0.01	2.5	0.19	5.7	0.02

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States